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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,841	09/17/2003	Yoshisada Nakamura	Q77504	2704
23373	7590	06/15/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			NAKARANI, DHIRAJLAL S	
			ART UNIT	PAPER NUMBER
			1773	

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/663,841	Applicant(s) NAKAMURA ET AL.	
	Examiner D. S. Nakarani	Art Unit 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-7 and 10-25 is/are pending in the application.
- 4a) Of the above claim(s) 10-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/05 & 02/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 10-25 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on July 26, 2005.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 2 and 4-7 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 6,720,064 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because the U. S. Patent No. 6,720,064 B2 claims an image-receiving sheet for electrophotography comprising support and a toner-receiving layer made of polyester resin. As per Example 1 the support paper coated both side with polyethylene comprising a mixture of 70 wt% high density

Art Unit: 1773

polyethylene having density of 0.950 and melt index of 8g/10 min. and 30 wt% low density polyethylene having density of 0.923 and melt index of 7 g/10 min. and toner receiving layer made of polyester resin such as TUFTONE U-5 which is disclosed in the present invention at page 27, line 14 (Example 1, Tables 1 and 2). The polyester resins of U. S. Patent No. 6,720,064 B2 are the same as the polyester resins disclosed in the present disclosure (Compare Col. 6, lines 4-17 of U. S. Patent No. 6,720,064 B2 with page 27, lines 7-17 of the present disclosure). Since polyester resins are the same all other properties specifically not disclosed are inherently there. Therefore it would have been obvious at the time of this invention made to use the support and the polyester resins disclosed in the U. S. Patent No. 6,720,064 B2 to make the image-receiving sheet for electrophotography.

4. Claims 1, 2 and 4-7 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 7 and 8 of U.S. Patent No. 6,936,395 B2.

Although the conflicting claims are not identical, they are not patentably distinct from each other because The U.S. Patent No. 6,936,395 B2 claims the support coated with the toner image-receiving layer made of polyester resin having claimed properties (claim 7). The U.S. Patent No. 6,936,395 B2 discloses support comprising support paper coated both side with polyethylene comprising a mixture of 70 wt% high density polyethylene having density of 0.950 and melt index of 8g/10 min. and 30 wt% low density polyethylene having density of 0.923 and melt index of 7 g/10 min. Thus polyethylene resin layer comprises at least one polyethylene having density of less than 0.935. The disclosed polyethylene resin layer deemed to meet claimed melt index since both polyethylenes have melt index less than 10 g/10 min. Therefore it would have

Art Unit: 1773

been obvious to a person of ordinary skill in the art at the time of this invention made to utilize support disclosed in the U.S. Patent No. 6,936,395 B2.

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(f) he did not himself invent the subject matter sought to be patented.

6. Claims 1, 2 and 4-7 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. Goto (U. S. Patent 6,720,064 B2) discloses an image-receiving sheet for electrophotography comprising support paper coated both side with polyethylene comprising a mixture of 70 wt% high density polyethylene having density of 0.950 and melt index of 8g/10 min. and 30 wt% low density polyethylene having density of 0.923 and melt index of 7 g/10 min. and toner receiving layer made of polyester resin such as TUFTONE U-5 which is disclosed in the present invention at page 27, line 14 (Example 1, Tables 1 and 2). Goto's polyester resins are the same as polyester resins disclosed in the present disclosure (Compare Col. 6, lines 4-17 of Goto with page 27, lines 7-17 of the present disclosure). Since polyester resins are the same all other properties specifically not disclosed are inherently there.

7. Claims 1, 2 and 4-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Goto (U. S. Patent 6,720,064 B2)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Goto (U. S. Patent 6,720,064 B2) discloses an image-receiving sheet for electrophotography comprising support paper coated both side with polyethylene comprising a mixture of 70 wt% high density polyethylene having density of 0.950 and melt index of 8g/10 min. and 30 wt% low density polyethylene having density of 0.923 and melt index of 7 g/10 min. and toner receiving layer made of polyester resin such as TUFTONE U-5 which is disclosed in the present invention at page 27, line 14 (Example 1, Tables 1 and 2). Goto's polyester resins are the same as polyester resins disclosed in the present disclosure (Compare Col. 6, lines 4-17 of Goto with page 27, lines 7-17 of the present disclosure). Since polyester resins are the same all other properties specifically not disclosed are inherently there.

8. Claims 1, 2 and 4-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Goto et al (U. S. Patent 6,936,395 B2)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Goto et al (U. S. Patent 6,936,395 B2) disclose an image-receiving sheet for electrophotography comprising support paper coated both side with polyethylene comprising a mixture of 70 wt% high density polyethylene having density of 0.950 and melt index of 8g/10 min. and 30 wt% low density polyethylene having density of 0.923 and melt index of 7 g/10 min. and toner receiving layer made of polyester resin having claimed properties (Example 1, Tables 1 and 2 and col. 14, lines 31-62 and claim 7).

9. Claims 1, 2 and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ashida et al (U. S. Patent 5,824,462) in view of Ogino et al (U. S. Patent Application Publication 2002/0037176 A10) Takehana et al (U. S. Patent 5,885,698) and Ikeuchi et al ((U. S. Patent 6,444,383 B2).

Ashida et al disclose a resin coated paper comprising a paper coated on side (the reverse side) with a first resin layer comprising a mixture of high density polyethylene (HDPE) and low density polyethylene (LDPE) and another side (the obverse side on which an image-forming layer (i.e. image receiving layer) with second resin layer comprising a mixture of titanium dioxide (10 wt%), LDPE (9.5 wt%, density=0.920 g/cm³, MFR=8.5 g/10 min.), LDPE (65 wt%,

Art Unit: 1773

density=0.920 g/cm³, MFR=4.5 g/10 min.) and HDPE (15 wt%, density=0.970 g/cm³, MFR=7.0 g/10 min.) (Example 19, col. 27, line 58 to col. 28, line 21). Ashida et al disclose that the resin coated paper is useful as the support for photocopying print paper (i.e. electro photographic paper) (Col. 13, line 46). Ashida et al disclose image receiving layer can be made of polyester resins, poly(vinyl acetate) resins etc. (Col. 14, lines 21-37). These resins are deemed to be thermoplastic resins unless shown otherwise. The polyethylenes of the second layer have at least one polyethylene having density of 0.920 g/cm³. The mixture of polyethylenes recited above for the second resin layer when melt compounded would result in polyethylene compounded product having density of 0.928 g/cm³ and melt flow rate between 4.5 and 8.5 g/10 min. Ashida et al forms support by melt extrusion coating (Col. 28, line 14). Ashida et al's second resin layer comprises two polyethylene having different densities and the amount of polyethylenes is 89.5 wt%. Ashida et al fail to disclose claimed properties of toner image receiving layer forming polyester resin.

Ogino et al disclose an electro photographic transfer sheet comprising paper support (40) coated both side of the paper support (40) polyethylene coating layers (41) and an image receiving layer (43) formed of a thermoplastic polyester resin (Paragraph 0050). The thermoplastic polyester resin has glass transition temperature 30°C or less, weight average molecular weight of 15,400 and number average molecular weight of 6,600 thus Mw/Mn = 2.33 (Paragraph 0122). The polyester resin is an aqueous dispersion (paragraph 0101). Ogino et al disclose a polyester resin mixture comprising 50 parts of the polyester resin, NE382-1 produced by Kao Corp and 50 parts of the polyester resin GK130 produced by Toyobo Co.,Ltd. for the image receiving layer (43) (See paragraph 0124). The polyester resin NE382-1 deemed to be

Art Unit: 1773

equivalent to Tuftone NE-382 disclosed at page 27 lines 13-14 of present disclosure and the polyester resin GK130 deemed to be equivalent to Vylon GK-130 disclosed at page 27, line 13 of present disclosure unless shown otherwise. Therefore the polyester mixture of Ogino et al deemed to meet claimed properties unless shown otherwise.

Takehana et al disclose an electro photographic image receiving film having image receiving layer made of water dispersible polyester having glass transition temperature 35⁰ C or higher (col. 5, lines 18-24), a number average molecular weight of from 1500 to 5000 and Mw/Mn of from 1.2 to 3.0 (col. 6, lines 25-30).

Ikeuchi et al disclose an image receiving sheet having polyester image receiving layer. The polyester has number average molecular weight ranging from 1500 to 7000. Ikeuchi et al disclose that when number average molecular weight is low, the resin is too soft and has excessive blocking and when the molecular weight is high, the resin is too hard and decreases compatibility with toner (col. 7, lines 11-55). Ikeuchi et al's polyester resin has glass transition temperature 53⁰ C or higher (Examples).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of this invention made to utilize of disclosures of Ogino et al, Takehana et al and Ikeuchi et al in the invention of Ashida et al et al to use polyester resin of Ogino et al, Takehana et al or Ikeuchi et al for image receiving layer depending on toner compatibility and desired cohesive energy for toner.

No claims are allowed.

Art Unit: 1773

10. Receipt of Information Disclosure Statements filed December 19, 2005 and February 28, 2006 is acknowledged and all recited documents have been made of record. All recited non-English documents have been considered to the extent of provided abstract in English.

11. Applicant's arguments filed March 27, 2006 have been fully considered but they are not persuasive. In reference to rejection of claims 1, 2 and 4-9 under 35 U.S.C. 103(a) as being unpatentable over Ashida et al (U. S. Patent 5,824,462) in view of Ogino et al (U. S. Patent Application Publication 2002/0037176 A10) Takehana et al (U. S. Patent 5,885,698) and Ikeuchi et al ((U. S. Patent 6,444,383 B2), applicants mainly describes what each references teaches and state that the Examiner has failed to establish a prima facie case of obviousness since none of the cited references teaches a self dispersing water-dispersible polyester resin satisfying at least property (4) of present claim 1.

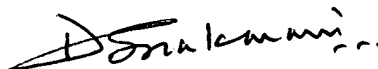
These arguments are un persuasive because Ogino et al disclose a polyester resin mixture comprising 50 parts of the polyester resin, NE382-1 produced by Kao Corp and 50 parts of the polyester resin GK130 produced by Toyobo Co.,Ltd. for the image receiving layer (43) (See paragraph 0124). The polyester resin NE382-1 deemed to be equivalent to Tuftone NE-382 disclosed at page 27 lines 13-14 of present disclosure and the polyester resin GK130 deemed to be equivalent to Vylon GK-130 disclosed at page 27 line13 of present disclosure unless shown otherwise. Therefore the polyester mixture of Ogino et al deemed to meet claimed properties (1) to (4) unless shown otherwise.

Art Unit: 1773

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. S. Nakarani whose telephone number is (571) 272-1512. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



D. S. Nakarani
Primary Examiner
Art Unit 1773

DSN
June 11, 2006.